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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/730,644

12/08/2003

Thomas E. Chefalas

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2995

7590

07/05/2006

Eric W. Petraske  
68 Old Hawleyville Road  
Bethel, CT 06801

EXAMINER

LANE, JOHN A

ART UNIT

PAPER NUMBER

2185

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/730,644

Applicant(s)

CHEFALAS ET AL.

Examiner

Jack A. Lane

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office action is responsive to the application filed 12/08/2003. Claims 1-21 are presented for examination. The serial number of the copending application on page 6 of the specification is requested. The attorney docket number must be deleted.

2. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The examiner requests, in response to this Office action, any documentation known to qualify as prior art under 35 U.S.C. sections 102 or 103 with respect to the invention as defined by the independent(s) claims. That is, any prior art (including any documentation used to develop the disclosed/claimed subject matter, background art and any products for sale) similar to the claimed invention that could reasonably be used in a 102 or 103 rejection. Furthermore, if applicant has knowledge of/been made aware of an assertion (perhaps by another examiner in a rejection or in a court proceeding) that a prior art element/device corresponds to or anticipates a presently claimed limitation then such assertion must be provided to the examiner.

The examiner is specifically looking for the following that appears to represent the main invention(s)/embodiment(s): A device (claimed “agent”) that intercepts requests ( claimed “calls”) to disk and directs request to cache (claimed “non-rotating temporary storage” or auxiliary storage) when disk powered down.

This request does not require a search. Support for this request is derived from 37 CFR 1.56 and 1.105, however, it is not intended to interfere with or go beyond that **required** under 37 CFR 1.56 or 1.105.

The request may be fulfilled by asking the attorney(s) of record handling prosecution and the inventor(s)/assignee for references qualifying as prior art. A simple statement that the query has been made and no prior art found is sufficient to fulfill the request. Otherwise, the fee and certification requirements of 37 CFR section 1.97 are waived for those documents submitted in reply to this request. This waiver extends only to those documents within the scope of this request that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this request and any information disclosures beyond the scope of this request are subject to the fee and certification requirements of 37 CFR section 1.97.

In the event documentation (e.g. newly submitted/previously submitted on an IDS, incorporated by reference or "common knowledge" generally found in the background section but not a publication) is determined to qualify as prior art, a discussion of relevant passages, figs. etc. with respect to the claims must be provided. That is, for at least each **independent** claim limitation (including structural and functional limitations linking claim elements, e.g. coupled to, responsive to) identify a corresponding prior art element by page, line and/or fig. Since applicant is most knowledgeable of the present invention and submitted art, a discussion of the reference(s) with respect to the instant claims is essential.

**The examiner also requests**, in response to this Office action, a showing of support for the following: Correlation and identification of what structure, material, or acts set forth in the

specification would be capable of carrying out a function recited in a means or step plus function claim limitation (i.e. “agent means”, “non-rotating temporary storage means”); All claim language that does not have antecedent basis in the descriptive portion of the specification. That is, if an exact claim word or phrase cannot be found in the descriptive portion of the specification (e.g. by text searching), such claim word or phrase must be identified. Applicant must specifically state that all claim language exists in the descriptive portion of the specification; Claim language added to any present claims on amendment and any new claims. Indicate support for claim language/limitation(s) (including structural and functional language linking claim elements e.g. coupled to, responsive to) by specifically pointing to page(s) and line no(s). in the specification and/or drawing figure(s) and the corresponding limitation. This request is derived from 37 CFR 1.105 and will assist in prosecuting the application.

**Additionally**, in the event documentation is incorporated by reference (e.g. copending application identified on page 6) and is relied upon for supporting claim limitations, such supporting documentation and limitations must be identified. Applicant must specifically state that the incorporated documentation is not needed to support the present claims, if such is the case, in response to this request.

When responding to the Office action, applicant is advised to clearly point out the patentable novelty the claims present in view of the state of the art disclosed by the reference(s) cited or the objections made. A showing of how the amendments avoid such references or objections must also be present. See 37 C.F.R. 1.111(c).

When responding to this Office action, applicant is advised to provide the line and page numbers in the application and/or reference(s) cited to assist in locating the appropriate paragraphs.

This Office action includes a requirement for information under 37 CFR 1.105. A complete reply to this Office action must include a complete reply to the requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

3. Claim 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, line 6, "said temporary storage" lacks a clear antecedent. On line 7, the language "computer program" lacks antecedent basis. The language "shut down" is unclear. Perhaps "shut down" should be ---exits--- to be consistent with the specification.

In claim 2, line 1, "said agent" should be ---said agent means---. Dependent claims 2-6 must be reviewed for similar antecedent problems.

Regarding claim 8, lines 5 and 6, "temporary storage" lacks a clear antecedent. Perhaps --means--- should be inserted after "storage." On line 6, "said agent means" lacks antecedent basis. On line 7, "said computer program" lacks antecedent basis. The language "shut down" is unclear. Perhaps "shut down" should be ---exits--- to be consistent with the specification.

The remaining dependent claims 9-14 must be reviewed for antecedent problems.

Regarding claim 15, "An article of manufacture in computer readable form" is unclear. What is the article of manufacture? The specification does not mention a storage medium. On lines 5 and 7, "temporary storage" lacks a clear antecedent. On line 7, "said agent means" lacks antecedent basis. On line 8, "said computer program" lacks antecedent basis. The language "shut down" is unclear. Perhaps "shut down" should be ---exits--- to be consistent with the specification.

The remaining dependent claims 16-21 must be reviewed for antecedent problems.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-21 are rejected under 35 U.S.C. 102(a and/or b) as being anticipated by the admitted prior art found the Background section of the present specification.

The admitted prior art describes a well known cache memory (generally non-rotating semiconductor) for storing data that is searched for requested data when a disk drive is powered down. Cache memory is generally backed up to the disk drive whenever the disk drive is powered on so that the cache and disk drive remain coherent. The claimed "agent means" corresponds to any cache control circuitry for intercepting or snooping a request for data.

The examiner believes all dependent claim features not specifically discussed above are expressly or inherently taught by the admitted prior art. The remaining dependent claim features, while part of the invention, do not appear essential to the main invention found in the independent claims. Thus, a detailed discussion of claim feature(s) is not warranted at this time. Support for this line of reasoning is derived from 37 C.F.R. 1.105. 37 C.F.R. 1.105 permitting “stipulations as to facts” or “whether a dependent claim element is known in the prior art based on the examiner having a reasonable basis for believing so.”

In the event applicant disagrees with the characterization of certain dependent claim elements as being “expressly or inherently” taught by the admitted prior art, applicant must specify exactly what claim elements are considered “novel” or “allowable” and why they are allowable (e.g. the claim feature is not suggested/taught in the art of record).

**Any response to this action should be mailed to:**

Under Secretary of Commerce for Intellectual Property and Director of the  
United States Patent and Trademark Office  
PO Box 1450  
Alexandria, VA 22313-1450

**or faxed to:**

(571) 273-8300, (for Official communications intended for entry)

**Or:**

(571) 273-4208, (for Non-Official or draft communications, please label  
"Non-Official" or "DRAFT")

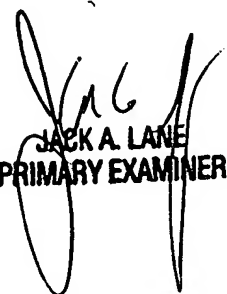


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack A. Lane whose telephone number is 571 272-4208. The examiner can normally be reached on Mon-Fri from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571 272-4210.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272-2100.

  
JACK A. LANE  
PRIMARY EXAMINER